

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D130-701 REV. G AND INSTRUCTIONS FOR
CONTINUED AIRWORTHINESS ICA-D130-701 REV.5 OR LATER APPROVED REVISION

REF. TCCA STC: SH94-14
REF. FAA STC: SR00213NY
REF. EASA STC: 10016996
REF. ANAC STC: 2007S03-03

1.0 PURPOSE

The purpose of this Dart Service Instruction (DSI) is to provide instructions for the replacement of the D2332-041 Lid Prop Assembly with D3969-1 Gas Spring.

This DSI is applicable to the D130-701-041 Heli-Utility-Basket at CHG 007 or earlier or the D130-701-043 Heli-Utility-Basket at CHG 011 or earlier with the D2332-041 Lid Prop assembly.

2.0 PROCEDURE

To remove the D2332-041 Lid Prop Arm Assembly and install the DSI 9820-011 Automatic Lid Opener, perform the following procedure at both ends of the basket:

NOTE: Once this modification is complete it will not be possible to re-install the D2332-041 Prop Arm. It is acceptable to install shorter or longer bolts if required. It is also acceptable to add washers if necessary.

1. Remove the D2332-041 Prop Arm and discard Prop Arm and its associated hardware.
2. Grind flush the D2327-3 Spacer Bushing on the end of the basket as shown in Figure 1 (it is permissible to grind all 4 spacers flush). Touch up paint per ICA-D130-701 Section 5.2.4.
3. On the D3172-041 Basket Base, locate the D3953-5 Gas Spring Stud as shown in Figure 1. Trim steel mesh locally as required. Transfer mark and drill 2x $\varnothing 0.194$ holes through the D3172-041 Basket Base Assembly square tube structure as shown in Detail C. Touch up paint per ICA-D130-701 Section 5.2.4.
4. On the D2512 Basket Lid Assembly, locate the D3953-1 Gas Spring Bracket as shown in Figure 1. Trim mesh locally as required. Touch up paint per ICA-D130-701 Section 5.2.4. If applicable, transfer holes to the D130-701-041 Heli-Utility-Basket at CHG 003 or earlier per Detail D.
5. On the D3172-041 Basket Base Assembly, install the D3953-5 Gas Spring Stud using 2x AN3C11A Bolts, 2x NAS1149C0332R Washers and 2x MS21043-3 Nuts as shown in View E-E. At the installer's discretion, install bolts wet using Proseal 890 B-2 (PRC) and seal all gaps on mating parts using Proseal 890 B-2 (PRC) or equivalent. Torque fasteners per Table 25-1 of ICA-D130-701.
6. Install the D3953-11 Gas Spring Spacer, D3969-1 Gas Spring (Cylinder end), D3953-9 Gas Spring Washer, 1x NAS1149C0432R Washer, 1x AN310-4 Castellated Nut and 1x MS24665-231 Cotter pin as shown in View E-E. Install cotter pin per AC43.13-1B Chapter 7-127.
7. On the D2512 Lid Assembly, install D3953-17 Gas Spring Spacer and D3953-1 Gas Spring Bracket using 2x AN3C14A Bolts, 2x NAS1149C0332R Washers and 2x MS21043-3 Nuts as shown in View F-F. At the installer's discretion, install bolts wet using Proseal 890 B-2 (PRC) and seal all gaps on mating parts using Proseal 890 B-2 (PRC) or equivalent. Torque fasteners per Table 25-1 of ICA-D130-701.
8. Insert the D3953-3 Gas Spring Stud through the D3953-1 Gas Spring Bracket. Install the D3953-7 Gas Spring Spacer, D3969-1 Gas Spring (rod end), D3953-9 Gas Spring Washer, NAS1149C0432R Washer, AN310-4 Castellated Nut and MS24665-231 Cotter Pin as shown in View F-F. Install cotter pin per AC43.13-1B Chapter 7-127.

Note: The D3953-3 Gas Spring Stud can be held in place with a 9/16" open end spanner/wrench.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 19.01.24
CERT. NO.: SH94-14
ISSUE NO.: 7

APPROVED

A	NEW ISSUE; REF CAR19-285	PM	19.01.24
REV.	DESCRIPTION	BY	DATE
DESIGN	PM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	PM		
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9820	SHEET 1 OF 4
APPROVED	DSW	TITLE	SCALE
DE APPR.	DS	AUTOMATIC LID OPENER INST.NTS	
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9. Repeat steps 2 to 8 at the other end of the basket.
10. Test the installation. If installed properly, the gas springs should assist user in both opening and closing the basket lid.
11. Update aircraft logbook to indicate installation of the D130-701-141 Automatic Lid Opener Kit.

Note: With the lid in the closed position, the Gas Springs should not be fully compressed.

3.0 WEIGHT AND BALANCE

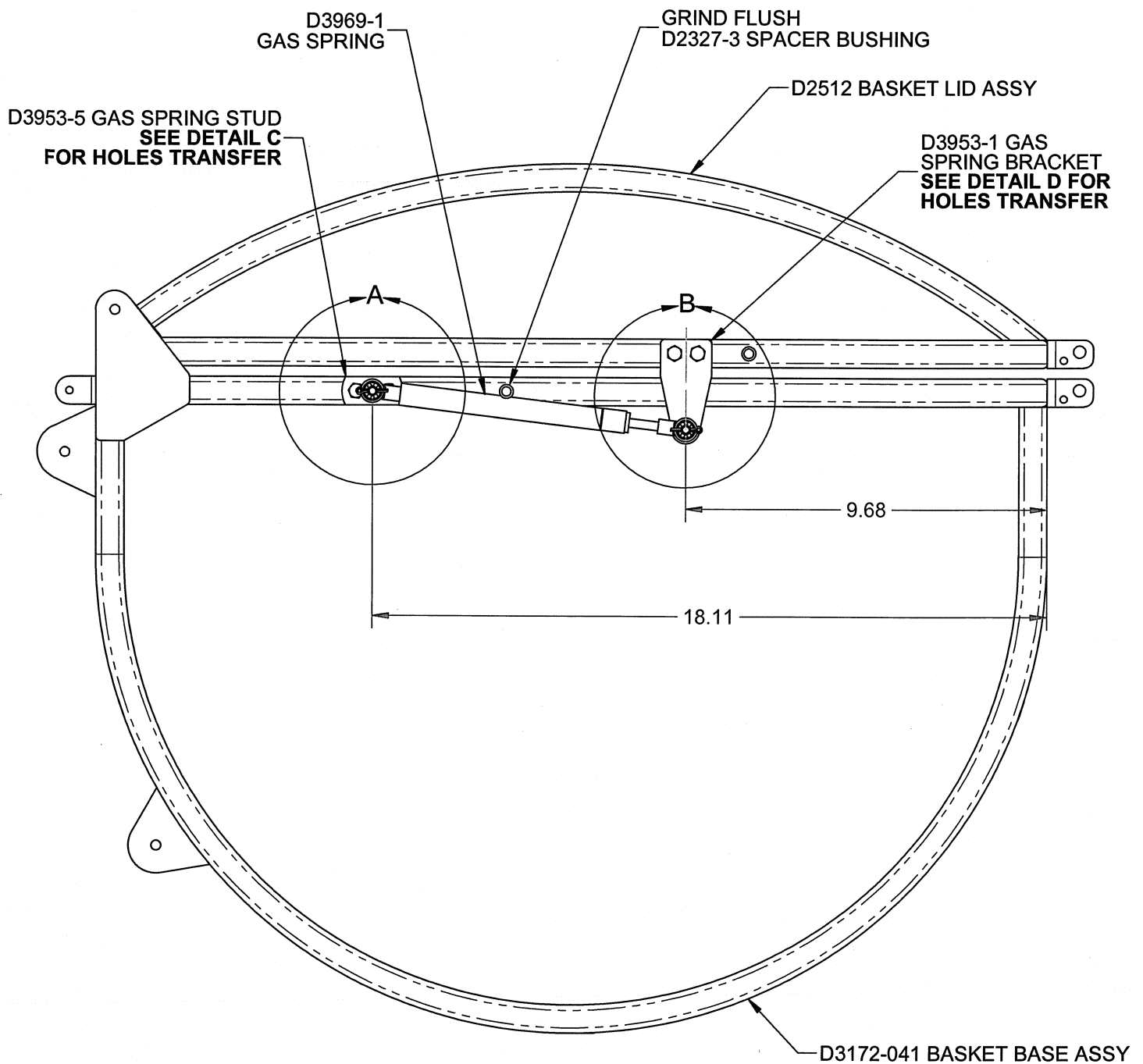
This DSI has a negligible effect on Weight & Balance.

4.0 PARTS LIST

QTY -011	PART NUMBER	DESCRIPTION
X	D130-701-141	AUTOMATIC LID OPENER INSTALLATION
2	D3953-1	GAS SPRING BRACKET
2	D3953-3	GAS SPRING STUD
2	D3953-5	GAS SPRING STUD
2	D3953-7	GAS SPRING SPACER
4	D3953-9	GAS SPRING WASHER
2	D3953-11	GAS SPRING SPACER
2	D3953-17	GAS SPRING SPACER
2	D3969-1	GAS SPRING
4	AN3C11A	BOLT, HEX HEAD
4	AN3C14A	BOLT, HEX HEAD
4	AN310-4	CASTELLATED NUT
8	MS21043-3	NUT
4	MS24665-231	COTTER PIN
8	NAS1149C0332R	WASHER
4	NAS1149C0432R	WASHER

APPROVED

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DRAWN	PM	
CHECKED	RF	DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9820 SHEET 2 OF 4
APPROVED	DSW	TITLE SCALE
DE APPR.	DS	AUTOMATIC LID OPENER INST. NTS
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**FIGURE 1: D130-701-141 AUTOMATIC LID OPENER INSTALLATION ON
D3172-041 BASKET ASSY WITH D2512 BASKET LID ASSY
(BOTH ENDS)
(MESH NOT SHOWN FOR CLARITY)**

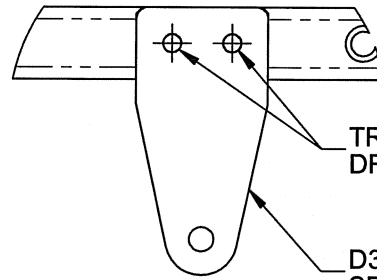
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MFG. APPR.	N/A	DSI 9820	SHEET 3 OF 4
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DE APPR.	DS	AUTOMATIC LID OPENER INST.NTS	
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TRANSFER MARK AND
DRILL Ø0.194 THRU

D3953-5 GAS
SPRING STUD (REF)

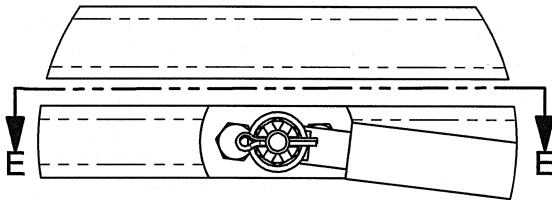
DETAIL C



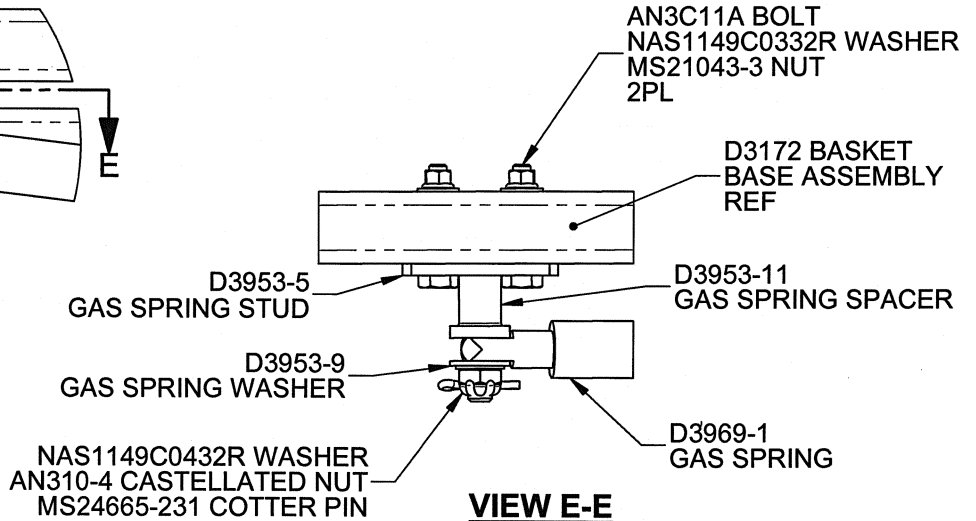
TRANSFER MARK AND
DRILL Ø0.194 THRU

D3953-1 GAS
SPRING BRACKET (REF)

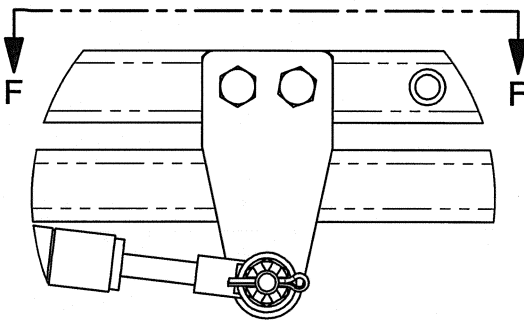
DETAIL D



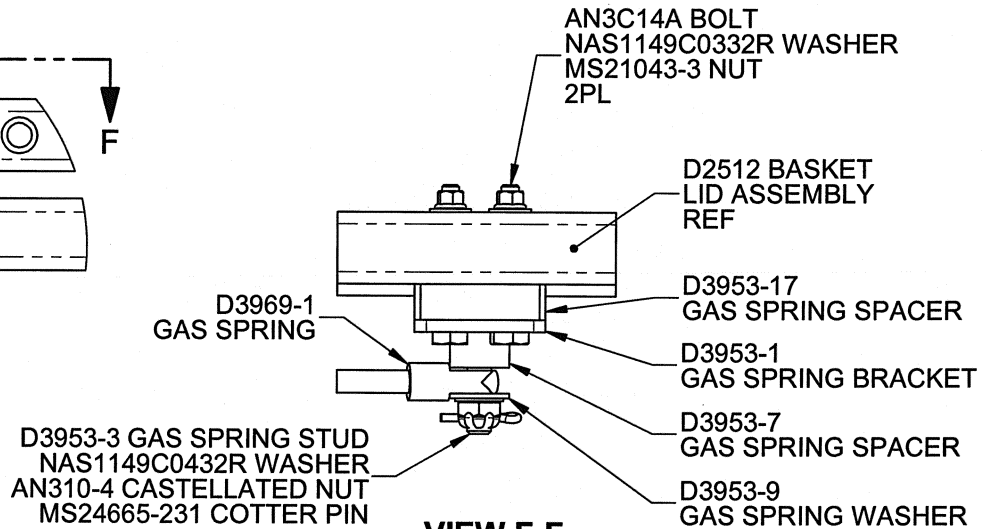
DETAIL A



VIEW E-E



DETAIL B



VIEW F-F

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DRAWN	PM
CHECKED	RF
MFG. APPR.	N/A
APPROVED	DSW
DE APPR.	DS
DATE	19.01.24

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
DSI 9820

REV. A

SHEET 4 OF 4

TITLE

SCALE

AUTOMATIC LID OPENER INST.NTS

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